

**ABSTRACT**

The invention provides for methods of monitoring the proliferation of cultured prostate cancer cells in the presence of POH, methods of treating an individual with prostate cancer or at risk of developing prostate cancer, and methods of reducing the risk of recurrence of prostate cancer in an individual who had previously been treated for prostate cancer. Methods of the invention further include treating an individual with benign prostatic hyperplasia (BPH) with POH as well as methods of screening for compounds that inhibit the proliferation of prostate cancer cells. The invention provides for compositions and articles of manufacture containing POH in particular formulations, and POH with a second compound that also exerts an effect on the androgen receptor.